

## WEST Search History

DATE: Thursday, September 19, 2002

<u>Set Name</u>	<u>Query</u>	<u>Hit Count</u>	<u>Set Name</u>
side by side		result set	
<i>DB USPT,PGPB,JPAB,EPAB,DWPI,TDBD; PLUR = YES; OP OR</i>			
L6	sampl\$4 near4 crystal\$8 near4 precipitat\$4	107	L6
L5	L4 near4 crystal\$8	66	L5
L4	lumen	44433	L4
L3	L1 same crystal\$8	1	L3
L2	L1 near4 crystal\$8	0	L2
L1	microvolume	233	L1

END OF SEARCH HISTORY

(FILE 'HOME' ENTERED AT 11:08:24 ON 19 SEP 2002)

FILE 'CAPLUS' ENTERED AT 11:08:40 ON 19 SEP 2002

L1        17490 S LUMEN  
L2        10 S L1 (2A) CRYSTAL?  
L3        1 S MICROVOLUME (2A) CRYSTAL?  
L4        0 S MIRCO (1W) VOLUME  
L5        34 S MICRO (1W) VOLUME  
L6        1 S L5 AND CRYSTAL?

FILE 'STNGUIDE' ENTERED AT 11:17:42 ON 19 SEP 2002

FILE 'INSPEC' ENTERED AT 11:20:21 ON 19 SEP 2002

L7        1 S L2  
L8        34 S L3 OR L5  
L9        6 S L3 OR L6

L6 ANSWER 1 OF 1 CPLUS COPYRIGHT 2002 ACS  
AN 1998:109901 CPLUS  
DN 128:028209  
TI **Micro-volume** dynamic light scattering and simultaneous  
video microscopic observation for screening of protein **crystal**  
growth  
AU Wessel, Th.; Ricka, J.  
CS Institute of Applied Physics, University of Bern, Bern, CH-3012, Switz.  
SO Proceedings of SPIE-The International Society for Optical Engineering  
(1998), 3199(Biomedical Systems and Technologies II), 299-305  
CODEN: PSISDG; ISSN: 0277-786X  
PB SPIE-The International Society for Optical Engineering  
DT Journal  
LA English  
CC 9 16 (Biochemical Methods)  
Section cross-reference(s): 6  
AB Dynamic light scattering (DLS), video microscopic and ultra-microscopic  
observation were simultaneously employed for screening of protein  
**crystal** growth in the vapor diffusion regime. The setup,  
consisting of a modified microscope equipped with a laser sheet  
(darkfield) illumination for ultra-microscopy, allows the visualization of  
clusters in the nanometer range as well as of macroscopic **crystals**  
parallel with the DLS measurements. The results of microscopic and  
ultra-microscopic observations, the DLS autocorrelation functions and the  
resulting relaxation time distributions for the std. protein lysozyme are  
presented. The special conditions for dynamic light scattering  
measurements in the pre and post crystn. phase with samples situated in  
small droplets and covered by a std. crystn. plate are discussed.  
ST dynamic light scattering video microscopy; protein **crystal**  
growth  
IT Light scattering  
(dynamic; micro-vol. dynamic light scattering and simultaneous video  
microscopic observation for screening of protein **crystal**  
growth)  
IT **Crystal** growth  
Optical fibers  
(micro-vol. dynamic light scattering and simultaneous video microscopic  
observation for screening of protein **crystal** growth)  
IT Proteins, general, properties  
FL: FEP (Physical, engineering or chemical process); PRP (Properties);  
PRC (Process)  
(micro-vol. dynamic light scattering and simultaneous video microscopic  
observation for screening of protein **crystal** growth)  
IT Microscopy  
(video; micro-vol. dynamic light scattering and simultaneous video  
microscopic observation for screening of protein **crystal**  
growth)

ANSWER 6 OF 6 INSPEC COPYRIGHT 2002 IEE  
AN 1971:245744 INSPEC DN A71026437

TI Electron-probe microanalysis.

AU Hornsved, E.M.

SO Atoomenergie en haar Toepassingen (Dec. 1970) vol.12, no.12, p.321-8  
CODEN: AETPAY ISSN: 0004-7228

DT Journal

TC Practical

CY Netherlands

LA Dutch

AB Describes the principles of electron-probe microanalysis and gives details of the commercial Cameca machine and its use. The equipment is designed for the identification and estimation of the components in a selected

micro-volume at the surface of a solid specimen from electron micrographs and by the analysis of the characteristic X-rays emitted when the surface is bombarded by an electron micro-beam. The beam has a diameter of 0.1-1  $\mu$  m, and the equipment can deal with atomic numbers down to 5 (boron), and can detect about 100 p.p.m. in a volume of

10 cubic  $\mu$  m, the smallest amount detectable being 10-14 g.

Identification is via a crystal spectrometer or a scanning counter. Examples are given of the application of the technique to the examination of UB4 particles in a UO2 matrix, of an Al2O3-UO2 eutectic mixed with an excess of Al2O3; of Incoloy-800; and of coated particles.

CC A8280 Chemical analysis and related physical methods of analysis

CT ELECTRON PROBE ANALYSIS  
ST electron probe microanalysis; Cameca machine; electron micrographs  
ET B\*U; UB4; U cp; cp; B cp; O\*U; UO2; O cp; Al\*O\*U; Al sy 3; sy 3; O sy 3; U  
sy 3; Al2O3; Al cp; Al2O3-UO2; Al\*O